PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference OP-02-PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416				
International application No. PCT/JP2004/016325	International filing date (daymonth/year) 04.11.2004	14.11.2003				
International Patent Classification (IPC) or national classification and IPC G02F1/03, G02F2/02						
Applicant OPTICAL COMB INSTITUT	TE, INC. et al					
This report is the international prelin under Article 35 and transmitted to the		this International Preliminary Examining Authority				
2. This REPORT consists of a total of _	E					
3. This report is also accompanied by Al	NNEXES, comprising:					
a. (sent to the applicant and	a. (sent to the applicant and to the International Bureau) a total of 8 sheets, as follows:					
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative					
	sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental					
	Bureau only) a total of (indicate type and nu	nmber of electronic carrier(s))				
	, containing a sequence listing and/or tables					
	related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).					
4. This report contains indications relation	ng to the following items:					
Box No. I Basis of the	report					
Box No. II Priority						
Box No. III Non-establis	shment of opinion with regard to novelty, ir	nventive step and industrial applicability				
Box No. IV Lack of unit	Box No. IV Lack of unity of invention					
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
Box No. VI Certain doct	locuments cited					
Box No. VII Certain defe	fects in the international application					
Box No. VIII Certain obse	Box No. VIII Certain observations on the international application					
Date of submission of the demand	Date of completion	of this report				
Name and mailing address of the IPEA/JP	Authorized officer					
Facsimile No.	Telephone No.					

Translation

International application No.
PCT/JP2004/016325

Box	No. I	Basis of the report			
1.		gard to the language, this report is based on the internation d under this item.	al application in the language in which	n it was filed, unless otherwise	
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:				
	<u> </u>	international search (Rule 12.3 and 23.1(b))			
	-	publication of the international application (Rule 12.4)			
	With m	international preliminary examination (Rule 55.2 and/ gard to the elements of the international application, this		which have been furnished to the	
2.	receiving this repo	g Office in response to an invitation under Article 14 ar	e referred to in this report as "origina	illy filed" and are not annexed to	
	$\overline{\square}$	e description:			
		nges 1-3,6-27		as originally filed/furnished	
	_	nges* 4,4/1,5,5/1	received by this Authority on 14.	_ ,	
	_				
	\square		received by this Addiointy on		
	∠ the	e claims:			
	no		·	as originally filed/furnished	
	no	os.*	as amended (together with	any statement) under Article 19	
	no	os.* 1,8,9,11,13	received by this Authority on	.09.2005	
	no	os.*	received by this Authority on		
	⋈ th	e drawings:			
	sh	neets 1-16		as originally filed/furnished	
	sh	neets*	received by this Authority on		
	sh	neets*	received by this Authority on		
	a	sequence listing and/or any related table(s) - see Supplem	ental Box Relating to Sequence Listing	3 -	
3.	⋈ т	he amendments have resulted in the cancellation of:			
		the description, pages			
	\triangleright	the claims, nos3			
		the drawings, sheets/figs			
		the sequence listing (specify):			
		any table(s) related to sequence listing (specify):			
4.	Ti th	his report has been established as if (some of) the amend be have been considered to go beyond the disclosure as fi	lments annexed to this report and liste led, as indicated in the Supplemental B	d below had not been made, since ox (Rule 70.2(c)).	
		the description, pages			
		the claims, nos.			
		the drawings, sheets/figs			
		the sequence listing (specify):			
		7			
	lf item 4	4 applies, some or all of those sheets may be marked "sup			

International application No.
PCT/JP2004/016325

Box	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1.	Statement			
	Novelty (N)	Claims 1, 2, 4-13	YES	
		Claims	_ NO	
	Inventive step (IS)	Claims _1, 2, 4-13	YES	
		Claims		
	Industrial applicability (IA) Claims 1, 2, 4-13		YES	
		Claims		
_				
2.	Citations and explanations (Rul			
	Document 1:	JP 8-166610 A (The Kanagawa Academy of		
		Science, Takanori SAITO), 25 June 1996		
		(25.06.96), paragraphs [0008] to [0011],		
		(Family: none)		
	Document 2:	JP 11-183858 A (Sumitomo Osaka Cement Co.,		
		Ltd.), 09 July 1999 (09.07.99), paragraphs		
		[0012], [0021], (Family: none)		
	Document 3:	JP 2003-228033 A (Sumitomo Osaka Cement		
1		Co., Ltd.), 15 August 2003 (15.08.03),		
	paragraph [0024]; fig. 5, (Family: none)			
	Document 4:	JP 5-323265 A (Nippon Telegraph And		
		Telephone Corp.), 07 December 1993		
		(07.12.93), (Family: none)		
	Document 5:	JP 7-159820 A (Nippon Telegraph And		
		Telephone Corp.), 23 June 1995 (23.06.95),		
		(Family: none)		
	Document 6:	JP 2002-156669 A (Mitsui Chemicals, Inc.),		
		31 May 2002 (31.05.02), fig. 3		
		& EP 1186942 A2 & US 1343906 A1		
	The inventions set forth in claims 1, 2 and 4-13			
		rentive step in relation to the documents		
		nternational search report. The feature		
1	22000 211 0110 2			

disclosures in documents 1-6.

Box No. V

International application No.
PCT/JP2004/016325

wherein the phase of the light propagated in the outward direction is modulated by a modulation signal and the phase of the light propagated in the inward direction is modulated by a weighted signal is not disclosed in any of documents 1-6. Moreover, a person skilled in the art would not be able to conceive of this feature from the

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;

International application No.
PCT/JP2004/016325

Box No. VII Certain defects in the international application
The following defects in the form or contents of the international application have been noted:
Claim 6 contains the wording "The optical frequency
comb generator as set forth in claim 3, characterized in
that…" but claim 3 has been deleted in the amendments.